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Responsive to 13 December 2005 Office Action

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REMARKS

This paper is responsive to any paper(s) indicated above, and is responsive in any other manner indicated below.

PENDING CLAIMS

Claims 28-30 and 32-38 were pending, under consideration and subjected to examination in the Office Action. Appropriate claims have been amended, canceled and/or added (without prejudice or disclaimer) in order to adjust a clarity and/or focus of Applicant's claimed invention. That is, such changes are unrelated to any prior art or scope adjustment and are simply refocused claims in which Applicant is present interested. At entry of this paper, Claims 28-30 and 39-44 will be pending for further consideration and examination in the application.

ALL REJECTIONS UNDER 35 USC '103 - TRAVERSED

All 35 USC rejections are respectfully traversed. However, such rejections have been rendered obsolete by the present clarifying amendments to Applicant's claims, and accordingly, traversal arguments are not appropriate at this time.

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However, Applicant respectfully submits the following to preclude renewal of any such rejections against Applicant's clarified claims.

All descriptions of Applicant's disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated hereat by reference. Further, all Office Action statements regarding the prior art rejections are respectfully traversed. As additional arguments, Applicant respectfully submits the following.

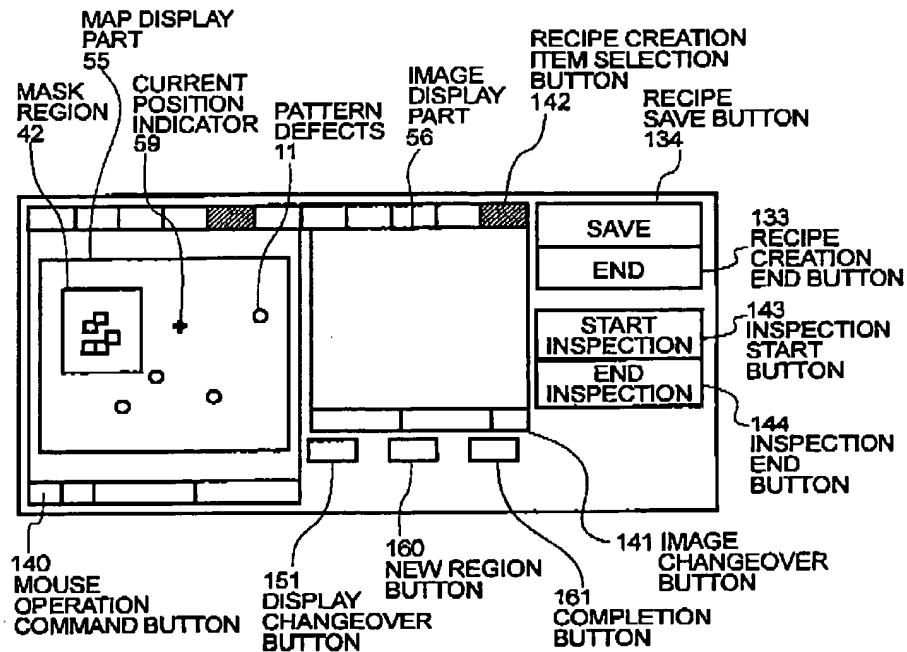
Applicant's disclosed and claimed invention is directed to improved pattern inspection arrangements (e.g., apparatus). During pattern inspection, at times, there are layout portions which change from specimen-to-specimen (e.g., die-to-die), but which are not defects, i.e., such may be called "don't care layout portions". An example might be terminal connector areas which will not affect/upgrade die operation, even if there are substantial variations thereof from die-to-die. In order to avoid irrelevant defect candidate areas, it would be useful to be able to designate select pattern areas as irrelevants or "don't cares". In short, part of Applicant's disclosed and claimed invention is directed toward enabling a user to easily set up a masked non-inspection region with respect to any patterned area to be inspected.

As further explanation, Applicant's FIG. 14 is reproduced herewith:

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FIG.14



Once a specimen has been scanned and an image containing defect candidates is obtained, such image can be displayed in the map display part 55 window. Applicant can utilize the "new region button 160" to indicate that he/she desires to designate a part of the image as a "don't care" masked region. A mouse or other input device can then be used to define a mask region 41 (including "don't care" defect candidates. Once the user is satisfied with the defined mask region, he/she may use the "completion button 161" to finally accept the mask region. Such FIG. and operation are especially described in Applicant's specification page 25.

In terms of distinguishing claim features/limitations, at minimum, Applicant's independent claim 28, for example, is distinguished by: ... an input device for inputting information of a non-inspection region to be masked on the object substrate by defining a region on the screen on which said distribution of

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defect candidates is displayed in a map form; a memory part for storing
coordinate data, pattern data or feature quantity data of the non-inspection region to
be masked on the object substrate inputted on the screen by the input device; and a
defect judging part in which the digital image detected by the image detecting
part is examined in a state that a region matching with a condition stored in
the memory part is masked and a defect is detected in a region other than said
masked region. Other ones of Applicant's claims have similar or analogous
features/limitations. Added dependent claims 43-44 further limit "wherein the
inputting is effected by a human user manually designating the non-inspection region
on the display screen."

Regarding preclusion of the previously-applied art, none of the applied
references, whether taken alone or in any combination, discloses or suggests any
type of arrangement meeting the above distinguishing ones of Applicant's limitations.

In addition to the foregoing, the following additional remarks from Applicant's
foreign representative are also submitted in support of traversal of the rejection and
patentability of Applicant's claims.

At the outset, one important feature of Applicant's invention is defining a mask
region in a conditioning operation by detecting defects in a selected die area and
then carrying out an inspection on a whole wafer one after another. Such feature is
described in Applicant's specification from [0058] in page 21 to [0074] in page 33.

In the conditioning operation, Applicant's embodiment detects defects by a
trial inspection in a selected die area among plural die areas formed on a
semiconductor wafer. Then, there is, for example, a displaying on a display screen
of a distribution of the detected defects in the selected die area in a map format as
shown in Applicant's Fig.14. And, on the display screen, an operator (e.g., human

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user) defines a mask region and registers such in a recipe to be used in a subsequent iteration of the inspecting step

Rebutting the prior art cited by the Examiner from above point, Gallarda, is silent about defining a mask region on a screen on which, defects distributed on a die area is displayed in a map format. And none of the references of record discloses defining a mask region in a trial inspection step by detecting defects in a die area selected from plural dies formed on a semiconductor wafer while the inspection is carried out all dies on the wafer.

As a result of all of the foregoing, it is respectfully submitted that the applied art would not support a '103 obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such '103 rejection, and express written allowance of all of the rejected claims, are respectfully requested.

EXAMINER INVITED TO TELEPHONE

The Examiner is herein invited to telephone the undersigned attorneys at the local Washington, D.C. area telephone number of 703/312-6600 for discussing any Examiner's Amendments or other suggested actions for accelerating prosecution and moving the present application to allowance.

RESERVATION OF RIGHTS

It is respectfully submitted that any and all claim amendments and/or cancellations submitted within this paper and throughout prosecution of the present application are without prejudice or disclaimer. That is, any above statements, or any present amendment or cancellation of claims (all made without prejudice or disclaimer), should not be taken as an indication or admission that any

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objection/rejection was valid, or as a disclaimer of any scope or subject matter. Applicant respectfully reserves all rights to file subsequent related application(s) (including reissue applications) directed to any/all previously claimed limitations/features which have been subsequently amended or cancelled, or to any/all limitations/features not yet claimed, i.e., Applicant continues (indefinitely) to maintain no intention or desire to dedicate or surrender any limitations/features of subject matter of the present application to the public.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are now in condition for allowance.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR '1.136. Authorization is herein given to charge any shortage in the fees, including extension of time fees and excess claim fees, to Deposit Account No. 01-2135 (Case No. 501.40830VX1) and please credit any excess fees to such deposit account.

Based upon all of the foregoing, allowance of all presently-pending claims is respectfully requested.

Respectfully submitted,

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